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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,366	08/29/2006	Robert D. Black	9099.17	3158

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MYERS BIGEL SIBLEY & SAJOVEC
PO BOX 37428
RALEIGH, NC 27627

EXAMINER	
NGUYEN, HIEN NGOC	
ART UNIT	PAPER NUMBER
3768	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/551,366	BLACK ET AL.	
	Examiner	Art Unit	
	HIEN NGUYEN	3768	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 September 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23 and 34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23 and 34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 September 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *06/12/2006, 11/02/2005, 09/29/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3, 5-7, 10, 13-18, 20-23 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mate et al. (US 2002/0193685) in view of Allen et al, (US 5,142,930).

Regarding claims 1-2, 5-7, 10, 13-17 and 20-22 Mate discloses:

- a target locating and in vivo sensor system used with a therapy delivery and imaging source; (see [0001] and [0009-0014]).
- an external solenoid member; (see [0032-0039] and [0041-0048]).
- at least one implantable wireless unit such as a solenoid, the solenoid held internally in the patient cooperates with the external solenoid to generate a coupling signal having signal strength that varies based on the position of the external solenoid member relative to the implanted unit; see [0041-0048] [0050], [0056-0061]).
- a computer module in communication with the controller comprising computer program code that evaluated the coupling signal strength in relation

to the position of the external solenoid and determines the position of at least one internally implanted unit; (see [0009-0014] and [0053]).

Mate use excitation markers and sensors to identify and track the position of the target. Internal excitation marker is located in or near the target. An external excitation source that is remotely excites the markers to produce an identifiable signal. However, Mate does not disclose a mechanism configured to controllably move the solenoid external of a patient, a controller configured to direct the movement of the mechanism and the controller is in communication with a power source.

Allen discloses a mechanical arm configured to hold and move solenoid external of a patient (Fig.3, abstract and col.4, lines 9-68). He also discloses a controller configured to direct the movement of the mechanism and the mechanism is in communication with a power source (Fig. 3, abstract, col. 2, lines 52-68, col. 3 lines 48-67 and col. 4, lines 9-68). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mate's system to include a mechanism (multi joint mechanical arm) that is connect to a power source and has a controller to control its movement and the movement of the solenoid external to the patient taught by Allen because the multi joint mechanical arm can freely rotate and move in three-dimensional therefore it provide a more effective way to keep track of the moving solenoid inside the body.

Regarding claims 3 and 18, Allen discloses:

- the mechanism is an articulated arm; (see col. 4, lines 9-68).
- the articulated arm is configured to controllably move the solenoid in three dimensions; (see col. 4, lines 9-68).

Regarding claim 23, the method claim herein is substantially the same in scope as the system in claim 1 above. The system applied the method. Thus claim 23 is rejected for at least the same reason as claim 1 above.

Regarding claim 34, the computer program product claim herein is substantially the same in scope as the system in claim 1 above. The system of claim 1 runs the computer program in claim 34. Thus claim 34 is rejected for at least the same reason as claim 1 above.

3. Claims 4, 8-9, 11-12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mate et al. (US 2002/0193685), in view of Allen et al, as applied to claims 4, 8-9, 11-12 and 19 (US 5142930) and further in view of Iddan (WO 97/33513).

Regarding claim 4, 8-9, 11-12 and 19, Mate and Allen do not explicitly disclose communicating with implanted sensor unit using a bit encoded RF signal, sensors with sensing parameter for temperature and radiation dose.

Iddan discloses:

- The external reader is configured to communicate with the implanted sensor unit using a bit encoded RF signal to communicate with many sensors, by using bit encoded Iddan can identify and separately communicate with each sensor; (see page 3, lines 1-33).

- at least one sensing parameter is a radiation dose for sensing radiation inside a body; (see page 9, lines 30-36).
- at least one sensing parameter is a temperature for sensing temperature inside the body; (see page 9, lines 30-36).
- the plurality of sensor units are configured to relay data regarding radiation dose and temperature to the reader; (see page 9, lines 1-29).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Mate's system to include bit encoded RF signal and sensors as taught by Iddan in order to allow the system to identify and separately communicate with sensors for sensing temperature and radiation dose inside the patient body.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HIEN NGUYEN whose telephone number is (571)270-7031. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571) 272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. N./
Examiner, Art Unit 3768

/Long V Le/
Supervisory Patent Examiner, Art Unit 3768